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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,220	02/24/2004	Rogério Jun Mizuno	P24607	8350
7055	7590	08/30/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EVANS, FANNIE L	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/784,220

Applicant(s)

MIZUNO, ROGERIO JUN

Examiner

F. L. Evans

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☒ Claim(s) 1, 6, 8 and 11 is/are rejected.
- 7) ☒ Claim(s) 2-5, 7 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 052404.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 6, 8 and 11 are rejected under 35 U.S.C. § 102(e) as being clearly anticipated by Tearney et al (US 6,831,781 B1).

Tearney et al disclose a confocal microscope (20), comprising: a multi-spectrum light source (source, Fig. 5A) that emits light having wavelengths within a predetermined wavelength range; a confocal probe (8) which includes an optical fiber (fiber, Fig. 11) that introduces the light emitted by the multi-spectrum light source in the confocal probe (8), a collimating lens (collimator, Fig. 11) that collimates light transmitted by and emerged from an end surface of the optical fiber, a dispersing prism (prism, Fig. 11 and line 41 of column 8) that receives the light collimated by the collimating lens and disperses the received light in a predetermined direction, light emerged from the dispersing prism and having the same wavelength being kept collimated, and a light converging optical system (objective, Fig. 11) that converges the light emerged from the dispersing prism on a target; a measuring device (32) that detects spectrum of the light reflected by the target; and an image generating system (34) that generates

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an image of the target based on an output of the measuring device. The prism is a triangular prism.

Movement of the probe in x-y planes is disclosed in lines 42-58 of column 5.

Allowable Subject Matter

Claim 10 is allowed over the prior art of record.

Claims 2-5, 7 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 2 and 10, the prior art of record, taken alone or in combination, fails to disclose or render obvious a confocal probe wherein an optical axis of the collimating lens, an optical axis of the light converging optical system and an optical path of a chief ray of the light emerged from the end surface of the optical fiber are substantially parallel with each other, the optical path of the chief ray of the light emerged from the end surface of the optical fiber being shifted with the optical axis of the collimating lens by a predetermined amount, in combination with the rest of the limitations of the claims.

As to claim 3, the prior art of record, taken alone or in combination, fails to disclose or render obvious a confocal probe wherein the collimating lens is arranged such that a distance from the collimating lens to the end surface of the optical fiber and a distance from the collimating lens to a light incident surface of the dispersing prism are substantially the same as a focal length of the collimating lens, in combination with the rest of the limitations of the claim.

As to claim 5, the prior art of record, taken alone or in combination, fails to disclose or render obvious a confocal probe wherein the light converging optical system is arranged such that a distance from the light converging optical system to a position where each dispersed beam is emerged from the dispersing prism is substantially the same as the focal length of the light converging optical system., in combination with the rest of the limitations of the claim.

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As to claim 7, the prior art of record, taken alone or in combination, fails to disclose or render obvious a confocal probe wherein the dispersing prism comprises a wedge prism, in combination with the rest of the limitations of the claim.


As to claim 9, the prior art of record, taken alone or in combination, fails to disclose or render obvious a confocal probe including a pinhole that shields light reflected by the target at a position other than the target side focal plane of the converging optical system, wherein the pinhole is the end surface of the optical fiber on which the light reflected by the target is incident, in combination with the rest of the limitations of the claim.

Fax/Telephone Numbers

Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner whose telephone number is (571) 272-2414.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


F. L. EVANS
PRIMARY EXAMINER
ART UNIT 2877

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August 29, 2005